

Message

From: Daguillard, Robert [Daguillard.Robert@epa.gov]
Sent: 5/30/2019 8:16:54 PM
To: OCSPP Daily Clips [OCSPP-Daily-Clips@epa.gov]
Subject: OCSPP Clips, 30 May 2019

[Chemical Watch: REACH registration phase 'not over' – Cefic](#)

[Minneapolis Star-Tribune: Roundup lawsuits mount in Minnesota](#)

[NPR Morning Edition: Safe Or Scary? The Shifting Reputation Of Glyphosate, AKA Roundup](#)

[Associated Press: New Hampshire sues 3M, DuPont, other chemical companies](#)

[American Chemical Society: Could Compostable Food Containers Be a Source of PFAS Pollution?](#)

[Citizen Truth: DowDuPont Giving Generously To Congressional Opponents of Chlorpyrifos Ban](#)

[The Community Word \(Peoria\), IL: Antibiotic use expands to citrus](#)

[Iowa Public Radio: Des Moines Water Works Pressures State Agencies To Clean Up PFAS Contamination](#)

[Popular Science: Eco-friendly packaging could be poisoning our compost](#)

[Chemical Watch: New Hampshire sues PFAS, firefighting foam manufacturers](#)

[Bloomberg Environment \(BNV\): How Bees and Farmers Got Together \(Podcast\)](#)

[Chemical Watch: Researchers pinpoint Chinese CFC-11 emissions to Shandong and Hebei](#)

Chemical Watch: REACH registration phase 'not over' – Cefic

<https://chemicalwatch.com/78081/reach-registration-phase-not-over-cefic>

One year on, dozens of dossiers pending; new submissions being made

30 May 2019 / Europe, REACH, Substance registration

A year has passed since the final REACH registration deadline, but it would be "misleading to think that the registration phase is over", Cefic has said.

Companies submitted their dossiers on 31 May last year and by the next day a total of 88,319 registrations had been logged for 21,551 substances over the three tonnage-band deadlines.

The REACH Directors' Contact Group (DCG) – an informal group of directors from the European Commission, Echa and industry associations – did, however, approve 576 requests under "exceptional circumstances" for an extension to submit the data.

Now, almost all of these have successfully completed their registrations with 25 remaining. These have a deadline of 1 June, Echa told Chemical Watch.

The agency has processed a further 6,968 registrations for 785 substances that came in after last year's deadline. However, Echa said it should be noted that these registrations are not all late submissions: "They could also be new market entrants who have to register before placing their chemical on the market."

And in a statement to Chemical Watch, Cefic emphasised this point, saying that the market is dynamic and that "almost every day we see new substances, uses and applications, as well as new players appear[ing] on the market".

Reflecting on the REACH milestone, the industry association said the most impressive achievement is that "we have managed to create the most comprehensive database on chemicals, their properties, uses and behaviour in the world".

Meanwhile, Echa said it recognised early on that REACH registration could be burdensome for SMEs – mainly because of the cost of data. "We did our best in helping SMEs with simpler IT tools, DCG recommendations and solutions. The availability of laboratories to perform the tests was also quite challenging, but we were able to address this issue with the DCG solutions." Reaching out to the smaller non-organised companies was "hard", it added.

'Disappearing' substances

As the final registration date neared, some in industry feared certain chemicals would drop off the market because companies would not be able to register them.

Speaking to Chemical Watch this week, Cefic said that as far as it is aware, "the absolute majority of the substances used on the market has been successfully registered allowing the chemical industry to continue supplying its markets and customers with no disruptions".

Echa, meanwhile, said it has "not heard" of substances disappearing from the market. The agency had discussions with industry ahead of the deadline on the potential disappearance of substances – but no potential disruptions were identified.

Monitoring the situation in collaboration with industry associations will be an ongoing exercise. "We also continue to encourage the customers using chemicals to still be active and clarify whether crucial substances for their businesses are registered."

The agency pointed out that figures communicated prior to the deadline were "forecasts or estimates" done more than 10 years earlier and not actual expectations.

European trade body SMEUnited, formerly known as Ueapme, was instrumental in airing concerns over potential missing substances. Today, in specific markets there is some evidence of a shortfall, advisor Marko Susnik said.

"It seems that we have a massive bottleneck in the field of some pigments, which are especially used in the textile industry." There are several factors contributing to this, he added, but REACH is an important one.

"In other areas we already observed a couple of cases where mixtures needed to be reformulated because suppliers decided to exclude substances from their portfolio."

Speaking more broadly, "we cannot observe a more general trend of disappearing substances. But it is too early to say, there should be still stocks available from before the last deadline. Those can be still sold to fill supply gaps."

Registration effort

The investment made by registrants should not be "underestimated", Cefic said. According to its calculations, the time and effort that goes into an average registration dossier consists of:

- completing more than 2,000 data fields in Iuclid;
- up to 70 physico-chemical, toxicological and ecotoxicological studies;
- 100-150 hours of work;
- studies that can take one to two years to complete;

- additional time and resources spent negotiating with consortia;
- complex use and exposure assessment; and
- the need to maintain and update dossiers.

Echa and industry are now ramping up work on evaluation under REACH. Last week the agency announced it is quadrupling the number of compliance checks it carries out to a fifth of all REACH registration dossiers in a fresh attempt at tackling non-compliant information on chemicals.

+++++

Chemical Watch: Researchers pinpoint Chinese CFC-11 emissions to Shandong and Hebei

<https://chemicalwatch.com/78049/researchers-pinpoint-chinese-cfc-11-emissions-to-shandong-and-hebei>

Combining atmospheric data with models

30 May 2019 / Built environment, China, Exposure monitoring & measurement

An international team of researchers has identified regions in eastern China they suspect are the source of new emissions of CFC-11, a substance long restricted under the Montreal Protocol.

In 2018, a team led by Stephen Montzka from the US National Oceanic and Atmospheric Administration published research in the journal *Nature* showing rapidly increasing levels of atmospheric trichlorofluoromethane (CFC-11) between 2012 and 2016.

An investigation by NGO Environmental Investigation Agency (EIA) then suggested illegal and widespread use of CFC-11 by Chinese manufacturers.

Some of the same research team, including Matt Rigby from the University of Bristol, UK, worked with colleagues to investigate the sources of the increase by combining atmospheric observations from Gosan, South Korea, and Hateruma, Japan, with global monitoring data and atmospheric chemical transport models.

They report that CFC-11 emissions from eastern mainland China were approximately 7,000,000 kilograms per year higher between 2014 and 2017 than between 2008 and 2012.

Their analysis suggests that new CFC-11 emissions from eastern mainland China explain a substantial fraction of the post-2012 rise in global emissions and are "probably due to new, unreported production and use". Their results trace the largest change in emissions to the provinces of Shandong and Hebei, and – to a lesser extent – Shanghai.

"The new study confirms findings of EIA's investigation in China last year (immediately following the release of the first study) that demonstrated widespread illegal use of CFC-11 in China's foam-blowing sector, primarily located in the areas covered by the study," said Avipsa Mahapatra, EIA's climate campaign lead.

"EIA sources visited four companies in Hebei and three in Shandong, all of which admitted to using CFC-11. Company representatives showed large stacks of drums containing the banned CFC-11 and demonstrated their use in the production of foam. EIA obtained foam samples from three different companies in Hebei and all three foam samples tested positive for CFC-11," she added.

Writing in the journal *Nature*, Professor Rigby and his colleagues said that they "cannot rule out additional, but probably smaller, increases from other parts of the world (for example, northern, southern and western Asia, Africa and South America), potentially including other parts of China, to which our current measurement networks are insensitive".

They call for "further investigation" to determine what processes have led to the increase in emissions in China.

"This is only the tip of the iceberg. The fact that scientists cannot yet determine where the rest of the production is coming from, shows a need for independent verification of Montreal Protocol implementation, which should include both expanded scientific atmospheric studies and independent civil society watchdog involvement," said Ms Mahapatra.

"The time is ripe for [the] Montreal Protocol to finally invest in strengthening and modernising its reporting, verification and licensing procedures and resolve the several information gaps that still remain."

+++++

Bloomberg Environment (BNV): How Bees and Farmers Got Together (Podcast)

<https://news.bloombergenvironment.com/environment-and-energy/how-bees-and-farmers-got-together>

Posted May 30, 2019, 10:58 AM

For the [third episode](#) of the Business of Bees, we traveled to California almond country this February just in time for the biggest pollination event in the world—what some call the “Woodstock for bees.”

Almonds are heavily dependent on bees for pollination. Almond farmers like Mike Doherty of Colusa County, just north of Sacramento, bring in hives from as far away as Texas, Florida, and North Dakota.

Doherty farms about 800 acres of almonds for Blue Diamond. He says the cost of renting commercial beehives to pollinate his almond trees has grown so much that it’s now one of his biggest expenses.

But declining bee populations and other existential threats to farming in the U.S. are even bigger concerns for Doherty.

“Oh, of course I’m worried about that. But I’m also worried there won’t be enough water in the future. There won’t be enough employees in the future. I’m worried about that,” Doherty said. “A farmer worries every day. I get up in the morning worrying. I go to bed worrying. That’s what we do.”

And there’s a lot of fruits, veggies, and nuts to worry about. According to the UN, the volume of agricultural production dependent on pollinators has increased by 300% in the last 50 years.

So how did our agriculture get to this point of dependency?

Interstate highways built in the 1950s and ‘60s made it much easier to move bees around, meaning bees could take lots of business trips. And over time, wild and native bees that were once adequate enough for farming were pushed aside, says Mace Vaughn, who co-directs the Pollinator Program at the Xerces Society for Invertebrate Conservation.

“The footprint of agriculture was smaller and farmers were growing much more diverse systems,” Vaughn said.

This shrinking of uncultivated lands is even worse for wild bees. Instead of the cover crops farmers used to plant to replenish their soil in the off season, most today have switched to synthetic fertilizers. Row crops replace wild plants, which means no flowers and no food for bees.

Vaughn says just even planting a small strip of wildflowers around the edge of fields or orchards could draw in native bee populations and decrease the need for commercial pollinators. But even if farmers are successful at putting more bee habitat back into the landscape, he says commercial pollinators like honeybees are simply too vital to think about abandoning altogether.

Listen and subscribe to the Business of Bees podcast from your mobile device:

Via [Apple Podcasts](#) | [Pocket Casts](#) | [Spotify](#) | [Overcast](#)

+++++

Chemical Watch: New Hampshire sues PFAS, firefighting foam manufacturers

<https://chemicalwatch.com/78042/new-hampshire-sues-pfas-firefighting-foam-manufacturers>

Lawsuit seeks clean-up costs from eight companies

30 May 2019 / Legal cases, PFCs, US states

New Hampshire is suing eight companies, claiming their manufacture and use of certain per- and polyfluoroalkyl substances (PFASs) has caused damage to the environment and residents.

It is the third PFAS lawsuit filed by a US state in the last year and follows claims from New York and New Jersey. New Hampshire filed two claims on Wednesday. The first – against 3M Company, DuPont and Chemours – alleges that the companies’ manufacture and sale of PFOA, PFOS, PFNA and PFHxS has led to widespread contamination of the state’s natural resources.

All three businesses are also named in the second suit, alongside Chemguard, Tyco Fire Products, Buckeye Fire Equipment Company, Kidde-Fenwal and National Foam. In this claim, the state seeks to address contamination arising from PFAS-containing aqueous film forming foam (AFFF) used in firefighting.

The state alleges that the companies’ products "were defective in design in a manner that was unreasonably dangerous to users or consumers", and that the defendants failed to warn of their dangers.

And it is seeking for the companies to cover, among others, costs, expenses and damages associated with the investigation, clean-up and monitoring of the state’s natural resources that have been contaminated.

'We are committed to taking all legal action necessary to ensure that those responsible account for the damage to the state and its resources caused by PFAS,' Gordon MacDonald, attorney general

"The defendants possessed unique knowledge of the dangers of PFAS chemicals but continued to make and sell them without warning the public of their health risks," the state's Attorney General Gordon MacDonald said in a statement announcing the legal action. "We are committed to taking all legal action necessary to ensure that those responsible account for the damage to the state and its resources caused by PFAS."

Tyco and Chemguard, however, say they will "vigorously defend this lawsuit".

"We make our foams to exacting military standards. And the US military and civilian firefighters have depended for decades on these foams to extinguish life-threatening fires," said the companies. "They continue to use them safely and reliably for that purpose today."

Chemours says that, while it hasn’t yet reviewed the two lawsuits, the company doesn't have manufacturing facilities in New Hampshire and does not manufacture, formulate or sell firefighting foam. And it added: "No Chemours' site globally has ever used PFOS in its manufacturing processes."

The other companies named in the suits did not respond to a request for comment by press time.

Growing PFAS action

The New Hampshire suit comes amidst growing concern over PFASs in the US and demands that companies be held financially accountable.

New Jersey has sued manufacturers that sold firefighting foam products containing PFASs, making environmental and product liability claims related to AFFF. It has also ordered four manufacturers to pay for a statewide PFAS investigation and clean-up but the companies have so far refused.

New York, meanwhile, filed a suit last year claiming that six companies manufacturing firefighting foam containing PFOS or PFOA had contaminated drinking water or groundwater in several communities.

PFAS contamination is becoming an increasingly prominent issue at the federal level as well. Recent weeks have seen hearings in both the US House of Representatives and Senate on a score of bills to address the class of substances.

At least 13 bills are under consideration in the House, with as many as six others under review in the Senate.

Note: Your access to this subscriber-only article is through a corporate subscription

+++++

Popular Science: Eco-friendly packaging could be poisoning our compost

<https://www.popsci.com/compostable-packaging-PFAS>

After a study uncovered PFAS in compost, regulators in Washington moved to ban this class of synthetic compounds.

By Ula Chrobak 1 hour ago

Per- and polyfluoroalkyl substances, or PFAS, are everywhere. There are thousands of these synthetic compounds, which get used in all sorts of products because of their flame retardant and oil- and water-repelling properties. PFAS coat nonstick pans, water-resistant fabrics, and glossy paper. They're also in fire-fighting foams.

PFAS are useful, but the major problem with many of them is that they never fully breakdown in the environment—and some have been found to pose serious health risks. That's why staff at Zero Waste Washington, a nonprofit advocating to reduce waste, were concerned about compostable food packaging, because the paper-based boxes, cups, and plates are lined with—you guessed it—a coating that often contains PFAS.

“Heather Trim from Zero Waste Washington called me and said we push everything to be composted that can be composted ... but I think we've made a big mistake, we didn't know about these perfluorinated compounds,” recalls Linda Lee, an agronomist at Purdue University. Lee proposed a study to investigate whether these chemicals were making their way into the compost, the results of which were published Wednesday in Environmental Science & Technology Letters.

The team collected 10 samples of compost from five states: Washington, Oregon, California, Massachusetts, and North Carolina. Nine of the 10 were from commercial composting facilities, and the last sample from a backyard pile. Seven of the composting facilities accepted food packaging. The scientists analyzed the compost for levels of different types of perfluoroalkyl acids (PFAAs), which PFAS degrade into.

The compost from facilities that used food packaging had substantially more PFAAs, around 10 times as much as the other samples. Most of these chemicals were shorter-chain versions of the compounds, which Lee says is a good thing. “The hope is that they're less problematic,” says Lee. “They don't bioaccumulate anywhere near what PFOS and PFOA would.”

The chemicals Lee is referencing—perfluorooctanesulfonate, or PFOS, and perfluorooctanoic acid, PFOA—are two kinds of long-chain PFAS. These chemicals were widely used until 2011, when manufacturers started voluntarily phasing them out because of concerning health risks. Studies have found links between exposure and cancer, birth defects, and thyroid dysfunction. The worst health risks are associated with high levels of exposure, which you might get from working in a factory that used PFOS and PFOA. But the reason these long-chain compounds are worrisome for everyone is because they never break down, and they accumulate in your body—the half life of PFOS in the human body is four to six years.

Since the phasing out of PFOS and PFOA, manufacturers in the US have started using more of the short-chain PFAS. These molecules also don't degrade in the environment, but they don't persist in the body for as long, which leads scientists to think that their health effects are less severe. “Some people think that the effects can be similar [between PFOS and short-chain PFAS],” says Lee. “I would hypothesize that you might get similar effects, but you'd need much higher concentrations.” While there is currently a federal health advisory standard for PFOS and PFOA in drinking water, 70 parts per trillion, broad action on all types of PFAS is limited.

In composting systems, these chemicals could become a problem in two ways. First, if the compost is applied to crops, the plants could absorb the PFAS, and we'd ingest the chemicals as we ate vegetables from these fields. The shorter-chain molecules are also very soluble, and can move into groundwater and rivers, thus threatening drinking water supplies.

When Lee concluded her findings, she sent a factsheet on them to Zero Waste Washington, and the information helped push the passage of Washington's Healthy Food Packaging Act. The bill bans all PFAS, long and short chain, in food packaging and takes effect in 2022, assuming the state's department of ecology can identify safe alternatives by then. “It's a small step but it could have a significant trickle effect,” says Lee of the legislation. “Whatever places like KFC, Burger King, and McDonalds do for Washington, they're not going to just say ‘we're just doing this packaging for the state of Washington.’ It'll hopefully trickle across the country.”

+++++

Iowa Public Radio: Des Moines Water Works Pressures State Agencies To Clean Up PFAS Contamination
<https://www.iowapublicradio.org/post/des-moines-water-works-pressures-state-agencies-clean-pfas-contamination#stream/0>

By [KATE PAYNE](#) • 20 HOURS AGO

The Des Moines Water Works is putting pressure on state agencies to clean up chemical contamination from a nearby military base. The utility suspects the substances are reaching its source waters, though not customers' tap water.

CHRISTINE WARNER HAWKS/FLICKR CREATIVE
COMMONS / [HTTPS://CREATIVECOMMONS.ORG/LICENSES/BY/2.0/](https://creativecommons.org/licenses/by/2.0/)

The Des Moines Water Works is putting pressure on state regulators to clean up contamination at a nearby military base. In letters to the state Department of Natural Resources and the Iowa Attorney General's Office, the utility called the chemicals a public health concern.

Earlier this year, a government report obtained by IPR confirmed toxic chemicals called PFAS had contaminated surface water and groundwater near the Air National Guard base in Des Moines.

At some testing sites on the base, levels of the chemicals were nearly 200 times the health advisories set by the U.S. Environmental Protection Agency.

PFAS, or per- and poly-fluoroalkyl substances, have been linked to military bases and manufacturing sites across the country. The chemicals can be toxic at trace levels and stay in the environment for extended periods of time. Exposure to PFAS has been linked to a higher risk of certain cancers and other medical conditions.

Now the Des Moines Water Works is calling on the DNR and the attorney general's office to help clean it up. In letters sent to the agencies last month, the utility said the contamination at the base "presents immediate and potential danger to public health and the environment" and that "a prompt response is necessary in order to safeguard public health."

Based on the utility's own analysis, PFAS from the base is leaching into Frink Creek, where it flows into the Raccoon River upstream of the Water Works' surface water intake. While further testing shows the chemicals are not being detected in customers' tap water, the intake is considered "a critically important part of the water supply infrastructure."

"Any time that we know that there is a contaminant that's making its way into the river, no matter how small an amount, we try to affect that, try to eliminate that," said Des Moines Water Works COO Ted Corrigan.

In a letter to Iowa Attorney General Tom Miller, the utility cited other instances of PFAS contamination across the U.S. Other cities and states have sued chemical manufacturers or federal agencies over the pollution, which has been linked to the use of fire suppressant foams that were standard at military installations.

Corrigan says he hopes to see the state handle the remediation on its own.

"We're going to allow the DNR and the Air Force to work through the process and see what kind of a plan they come up with. But it's our hope that they will develop a plan that will stop the movement of those contaminants off of the guard base," Corrigan said.

At press time, the Attorney General had not yet formally responded to the letter, though office spokesman Lynn Hicks says the department is following the DNR's lead.

"[W]e are working with the DNR as it assesses the levels of contamination, sources and other issues, and then will determine a course of action," Hicks wrote in an email.

The DNR is in the process of analyzing more samples from in and around the creek, in conjunction with the Water Works. In a formal response to the utility, the DNR's Ed Tormey said the department looks forward to working with the Water Works on remediation.

“The sampling plan focuses on identifying potential sources of PFAS in this area of the watershed. The data collected in this sampling event will be shared with you when it is received from the laboratory. The data will also be used by the Department to inform future steps to address this issue,” Tormey wrote.

A military analysis also found high levels of PFAS contamination in the surface water and groundwater near the [Air National Guard Base in Sioux City](#). Researchers suspect chemicals at that location may be seeping into the drinking water wells of private homeowners in the area.

The Air National Guard is in the process of coordinating [further testing](#) at and around both bases.

+++++

The Community Word (Peoria), IL: Antibiotic use expands to citrus

<http://thecommunityword.com/online/blog/2019/05/29/environmental-news-briefs-6/>

Environmental News Briefs

by [Community Word Staff](#) • May 29, 2019 • [0 Comments](#)

Antibiotic resistance in humans has been linked to overuse with livestock, but now the EPA is defying objections from both the Centers for Disease Control and Prevention and the Food and Drug Administration to allow widespread, systemic antibiotic use on citrus trees.

An antibiotic used to treat syphilis, tuberculosis and urinary tract infections among other human diseases is now being applied as a pesticide, according to The New York Times.

Since 2017, the EPA has allowed limited use of streptomycin and oxtetracycline on an emergency basis but is now expanding the allowed usage.

Both the EPA and CDC warn widespread use could spur mutations in germs that could threaten millions of lives.

The European Union has banned the use of both streptomycin and oxtetracycline for agricultural uses.

EPA eliminates funding for children’s health research centers

The EPA is cutting off funding to 13 research centers focused on children’s environmental health and disease prevention, according to a report in E&E News.

Critics view the move as part of President Trump’s efforts to undermine science that could lead to stricter environmental regulations.

Imperiled research centers include facilities at UCLA and Dartmouth College as well as Emory University where the center focuses on researching maternal health and preterm birthrates among African American women. Other centers study the long-term harm caused by pollution on child development.

Funding for these centers has been unique because it covers both research and public outreach to inform people of potential risks and protection strategies.

This is viewed as the latest move in the administration’s efforts to support chemical companies. The administration recently rejected a ban on the neurotoxic pesticide chlorpyrifos that is used in Central Illinois.

+++++

Citizen Truth: DowDuPont Giving Generously To Congressional Opponents of Chlorpyrifos Ban

<https://citizentruth.org/dowdupont-giving-generously-to-congressional-opponents-of-chlorpyrifos-ban/>

[Guest Post](#) May 29, 2019

Pesticide warning sign. (Photo: Austin Valley)

It’s “unconscionable for EPA to turn a blind eye as children and workers are exposed to this poison. If the EPA won’t do its job when it comes to chlorpyrifos, then Congress needs to act — and do so quickly.”

(MapLight) Lawmakers who are sitting out a fight to ban a controversial pesticide linked to brain damage in children and farmworkers have received about 27 times more campaign cash from its primary manufacturer since 2017 than House members pushing for a prohibition on chlorpyrifos.

Ten of the 107 cosponsors of the Ban Toxic Pesticides Act of 2019 reported receiving \$14,000 in campaign contributions since 2017 from the Midland, Mich.-based DowDuPont Inc. Federal Election Commission records show 118 of the 330 congressmen who haven't sponsored the measure received \$379,651 from Dow during the same period.

The disparity underscores the high stakes at issue in the long-running battle between environmentalists and Dow, a major corporate ally of the Trump administration that reported almost \$86 billion in sales last year. Although the Environmental Protection Agency decided to ban chlorpyrifos for residential use in 2000 because of its potential danger to children, the remaining uses of the pesticide have been at the center of legal battles since 2007, when a coalition of farmworkers and environmentalists filed suit to ban it completely.

Rep. Nydia Velazquez, the New York Democrat who sponsored a similar measure during the last session of Congress, said it's "unconscionable for EPA to turn a blind eye as children and workers are exposed to this poison. If the EPA won't do its job when it comes to chlorpyrifos, then Congress needs to act — and do so quickly."

A companion bill has been introduced by Sen. Tom Udall, D-N.M

+++++

American Chemical Society: Could Compostable Food Containers Be a Source of PFA Pollution?

<https://citizentruth.org/dowdupont-giving-generously-to-congressional-opponents-of-chlorpyrifos-ban/>

NEWS May 30, 2019 | Original story from the American Chemical Society.

Credit: Pixabay.

Compostable food containers seem like a great idea: They degrade into nutrient-rich organic matter, reducing waste and the need for chemical fertilizers. But much of this packaging relies on per- and polyfluoroalkyl substances (PFAS) to repel water and oil. Now, researchers reporting in ACS' Environmental Science & Technology Letters have shown that PFAS can leach from the containers into compost. However, the potential health effects of applying this material to crops are unknown.

PFAS are widely used in manufacturing because of their flame-retardant and water- and oil-repellent properties. Two long-chain PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), have been linked to negative health effects, so companies in the U.S. have voluntarily phased out their production. As a result, many manufacturers have switched to shorter-chain PFAS, whose health effects are less well known. Previous research has shown that PFAS in biosolids applied as fertilizer can migrate from soil to plants and then accumulate in humans through the food chain. Because compostable food packaging is becoming increasingly popular, Linda Lee and colleagues wanted to find out how much PFAS end up in the composted material.

The researchers obtained 10 samples from five states: nine from commercial facilities and one from a backyard compost bin. The researchers extracted perfluoroalkyl acids (PFAAs), which are compounds produced by microbial degradation of PFAS during composting, and analyzed them using mass spectrometry. The samples from seven facilities that accepted compostable food packaging had higher total levels of PFAAs than the two that didn't or the one from the backyard bin, which did not contain food packaging. The researchers found PFAAs corresponding to PFOA and PFOS, which are still produced in some countries, in all of the samples, but most of the detected compounds were short-chain PFAAs. The results from this study contributed to the passage in 2018 of the State of Washington's Healthy Food Packaging Act, which will ban the use of PFAS in paper food packaging after January 1, 2022, the researchers say.

+++++

Associated Press: New Hampshire sues 3M, DuPont, other chemical companies

https://www.washingtonpost.com/national/energy-environment/new-hampshire-sues-3m-dupont-other-chemical-companies/2019/05/29/8c223ef8-8270-11e9-b585-e36b16a531aa_story.html?utm_term=.53416256a3ae

By **Michael Casey** | AP

May 29 at 8:19 PM

CONCORD, N.H. — New Hampshire has sued eight companies including 3M and the DuPont Co. for damage it says has been caused by a class of potentially toxic chemicals found in pizza boxes, fast-food wrappers and drinking water.

The substances — known collectively as PFAS — have been used in coatings meant to protect consumer goods and are commonplace in households across the United States. Studies have found potential links between high levels of PFOA in the body and a range of illnesses including kidney cancer, increased cholesterol levels and problems in pregnancies. And because they persist for so long in the environment, PFAS has been dubbed a forever chemical.

With the lawsuits filed Wednesday, New Hampshire joins a growing number of states going after the makers and distributors of perfluoroalkyl and polyfluoroalkyl substances and the first to target statewide contamination.

“The actions we are taking today is intended to ensure that those responsible for PFAS contamination to our state’s drinking water supplies and other natural resources are held accountable,” New Hampshire Attorney General Gordon MacDonald said. “As alleged in the lawsuits, the defendants possessed unique knowledge of the dangers of PFAS chemicals but continued to make or sell them without warning the public of their health risks.”

New York state has sued six companies that made firefighting foam containing PFOS and/or PFOA chemicals that it says have contaminated drinking water in two communities and groundwater in another.

Last year, Minnesota reached an \$850 million settlement with 3M to resolve a lawsuit in which the state alleged some of the company’s chemicals damaged natural resources and groundwater in the Twin Cities’ eastern metropolitan area.

In an email regarding the latest lawsuits, 3M said it “acted responsibly in connection with products containing PFAS” and would “vigorously defend its environmental stewardship.”

DuPont said it doesn’t comment on pending litigation but would also defend its record of health, safety and environmental stewardship. A spokesman for Kidde-Fenwal Inc., said the company wouldn’t comment on the lawsuits.

A spokesman for Johnson Controls whose brands include Tyco and Chemguard, defended its use of firefighting foams.

“Tyco and Chemguard acted appropriately and responsibly at all times in producing our firefighting foams,” Fraser Engerman, director of global media relations for Johnson Controls, said in a statement.

“We make our foams to exacting military standards, and the U.S. military and civilian firefighters have depended for decades on these foams to extinguish life-threatening fires,” he continued.

Chemours said in a statement that it had not reviewed the lawsuit but “does not have manufacturing facilities in New Hampshire and does not manufacture, formulate or sell firefighting foam.”

It added that no Chemours site globally has ever used PFOS in its manufacturing processes, one of a group of PFAS chemicals.

The lawsuit also names Buckeye Fire Equipment and National Fire Foam Inc. They had yet to respond to requests for comment.

Health concerns about the ubiquitous compounds have prompted states to take legislative and regulatory action, including setting drinking water standards, conducting widespread testing and proposing bans on some PFAS packaging and even dental floss containing the chemical.

Last month, Vermont announced a settlement with a plastics company that would help hundreds of people in the Bennington area whose drinking water wells had been contaminated. Saint-Gobain Performance Plastics agreed to extend municipal water lines to more homes.

The Environmental Protection Agency, which has established a nonbinding health advisory threshold of 70 parts per trillion, earlier this year announced plans to consider limits on the toxic chemicals. That upset environmentalists who want action now.

The challenge for regulators is tracking down and treating a chemical that seems to be everywhere, from materials in landfills to the drinking water of homeowners, to the rivers where people fish.

EPA-mandated testing of about 5,000 of the roughly 150,000 public water systems in the U.S. completed in 2016 found dangerous levels of the same two PFAS compounds in 66 systems. Local and state testing has identified high levels in additional systems.

New Hampshire has been forced to connect more than 700 homes to new water systems in four communities due to PFAS contamination. It estimates that the contamination could end up impacting 100,000 people, with damages reaching several hundred million dollars.

New Hampshire does not seek a specific dollar amount in the lawsuits. The state wants the companies to pay the cost of investigating, cleaning up and remediating the contamination.

It accused DuPont and 3M of knowing the dangers of PFAS going back as far as the 1950s but not making it public while continuing to market the compounds.

“It is my hope that those responsible for the manufacturer and distribution of PFAS will recognize the severity of the issues they have caused and will become part of the solution,” MacDonald said.

The state hopes others follow its lead — as several did after it sued Exxon Mobil in 2003 over MTBE, a petroleum-based gasoline additive used to reduce smog-causing emissions. The state won a \$236 million judgment.

“We are taking a big first step on behalf of the country,” Republican Gov. Chris Sununu said of the lawsuits.

This story has been corrected to show that New Hampshire is not the second state to target the chemical companies and to identify one of the companies as DuPont, not Dupont. It also edits the story to correct the spelling of Attorney General Gordon MacDonald.

+++++

NPR Morning Edition: Safe Or Scary? The Shifting Reputation Of Glyphosate, AKA Roundup

<https://www.npr.org/sections/thesalt/2019/05/30/727914874/safe-or-scary-the-shifting-reputation-of-glyphosate-aka-roundup>

May 30, 2019 5:00 AM ET

Heard on Morning Edition

DAN CHARLES

John Draper pours glyphosate into the tank of his sprayer at the University of Maryland's Wye Research and Education Center.

Dan Charles/NPR

John Draper and I are sitting in the cab of a tractor on the research farm he manages for the University of Maryland, alongside the Chesapeake Bay. Behind us, there's a sprayer.

"So, away we go!" Draper says. He pushes a button, and we start to move. A fine mist emerges from nozzles on the arms of the sprayer.

We're spraying glyphosate, killing off this field's soil-saving "cover crop" of rye before planting soybeans.

Farmers have been using this chemical, often under the trade name Roundup, for about four decades now.

But now it's under fierce attack, accused of causing cancer. In three civil cases so far, U.S. juries have ordered Roundup's inventor, Monsanto, now owned by Bayer, to pay enormous damages to cancer survivors. Thousands more lawsuits have been filed.

For this chemical, and for Monsanto, it's a stunning change in fortunes.

Farmers felt that they could spray glyphosate with a clear conscience. It doesn't persist in the environment as much as, say, DDT did. It doesn't build up in groundwater like another widely used herbicide, atrazine. And it's certainly less toxic than some alternatives.

Article continues after sponsor message

"If we were spraying Gramoxone [the trade name for paraquat, another herbicide], even for you to be standing next to the sprayer, you'd have to have a respirator on. I'd have to wear a respirator even in the tractor, spraying," says Draper.

Monsanto started selling Roundup in 1974. For 20 years, it didn't attract much attention. That was Act 1 of the glyphosate drama: the quiet years.

Act 2 began in the late 1990s.

In 1996, Monsanto started selling genetically modified crops, or GMOs. They were modified so they could tolerate glyphosate. This meant that farmers could now spray this chemical right over their "Roundup Ready" soybeans, corn and cotton, and the crops would be fine but the weeds would all die.

It was a farming revolution built on glyphosate. Monsanto quickly became the world's biggest seed company. And farmers started spraying a lot more Roundup. Sales of the chemical increased more than ten-fold.

It all happened so fast that it scared a lot of people. There were anti-GMO protests around the world, and glyphosate came under increasing scrutiny.

A pedestrian walks past anti-glyphosate art in Popayán, Colombia. Glyphosate has been deployed in Colombia to wipe out coca and poppy crops.

Dan Charles/NPR

The International Agency for Research on Cancer, part of the World Health Organization, decided to carry out a new assessment of glyphosate's risks.

On March 20, 2015, IARC announced its conclusion: Glyphosate is "probably carcinogenic to humans."

That conclusion rests on three kinds of studies. First, IARC found "strong evidence" that glyphosate can damage DNA in cells. This kind of damage, inducing mutations, is the first step in causing cancer. Second, there are studies showing that when mice ate glyphosate, they got more tumors. Kate Guyton, a senior toxicologist at IARC, told reporters at a news conference that "these two studies gave sufficient evidence of cancer in animals."

Finally, IARC says there's "limited evidence" that people exposed to glyphosate had higher rates of a particular kind of cancer — non-Hodgkin lymphoma.

Guyton has been studying the causes of cancer for decades. Nothing she has ever done, she says, provoked as much of a reaction as the glyphosate announcement. "The Internet kind of exploded," she says.

Anti-GMO groups felt vindicated. Monsanto's top executives were furiously and launched a public relations campaign attacking IARC and its report.

And in the small town of Orange, Va., a personal injury lawyer named Michael Miller started lining up clients — people with non-Hodgkin lymphoma who'd used Roundup. "I decided that these people needed a voice in the courtroom," he says.

The scientific picture got more complicated, though. Other government agencies, including the U.S. Environmental Protection Agency and the European Food Safety Authority, took a fresh look at glyphosate. And they concluded that it probably is *not* giving people cancer.

David Eastmond, a toxicologist from the University of California, Riverside, helped conduct one of these glyphosate reviews for another part of the World Health Organization, the Joint FAO/WHO Meeting on Pesticide Residues.

"From my reading of things, if glyphosate causes cancer, it's a pretty weak carcinogen, which means that you're going to need pretty high doses in order to cause it," he says.

Eastmond says that there are several reasons for this apparent disagreement between IARC and the other agencies.

First, IARC just looks at whether glyphosate *can* cause cancer; regulators, on the other hand, have to decide whether it actually will, considering how much of it people are exposed to.

Second — and most important, according to Eastmond — different agencies considered different evidence. Eastmond's committee and regulatory agencies like the EPA considered a large number of studies that aren't publicly available because Monsanto paid for them and submitted them to the agencies. "I have never seen a chemical with as many animal cancer studies as glyphosate," Eastmond says.

IARC, however, didn't look at most of this research because it accepts only studies that are publicly available. This allows any other scientist to see exactly what IARC's conclusions are based on.

Eastmond, for his part, thinks company-financed studies are credible and valuable, despite the potential conflict of interest for companies carrying out those studies. The labs, he says, have to follow strict guidelines.

Finally, scientists sometimes look at the same data and disagree about what it means. Eastmond says that he and Guyton had "animated discussions" about some of the data. "We just evaluated the evidence differently, but, you know, these are honest disagreements [among] people who I think are well-meaning," Eastmond says.

Then Act 3 arrived. Glyphosate went to court. There were three civil trials in or near San Francisco.

Lawyers for Bayer, which now owns Monsanto, repeatedly reminded jurors that regulatory agencies had concluded that glyphosate is not a cancer risk.

Lawyers for the cancer victims, though, suggested that those same regulators couldn't be trusted because they'd been manipulated or fooled by Monsanto.

Miller and his legal team showed the juries a whole collection of internal Monsanto emails. In one, company executives described phone calls with an official at the EPA. As Miller describes it, the official said, "I don't need to see any more studies. I'm going to declare Roundup safe, and I'm going to stop another agency from looking at it."

Another Monsanto executive discussed ghostwriting papers on glyphosate's safety that scientists could publish under their own names.

"I think the jury was rightfully offended," Miller says.

All three trials ended with resounding verdicts in favor of the cancer victims. The juries ordered Bayer to pay huge punitive damages. In the most recent case, the damages totaled \$2 billion.

Bayer is appealing these verdicts — and the damages probably will be reduced. But more lawsuits are waiting. The total value of Bayer's stock has fallen \$40 billion since the first verdict was announced.

Alexandra Lahav, a professor at the University of Connecticut School of Law, says that one lesson of this case so far is that attempts to get favorable decisions from regulators can backfire in court.

"They then open themselves up for the jury to say, 'Wait a minute — you're trying to convince the regulator not to regulate you, and now you want me to believe that the regulator is completely objective,'" Lahav says.

When regulators are seen as weak or ineffectual watchdogs, she says, their seal of approval also carries less weight with the public — and with juries.

The next glyphosate trial is set for August in St. Louis.

+++++

Minneapolis Star-Tribune: Roundup lawsuits mount in Minnesota

<http://www.startribune.com/roundup-lawsuits-mount-in-minnesota/510594362/>

A wrongful-death suit is the latest Minnesota claim that Roundup has caused cancer, joining thousands from around the U.S.

By Jennifer Bjorhus Star Tribune

MAY 29, 2019 — 10:02PM

A 44-year-old Elk River man is among the latest Minnesotans to join a nationwide flood of plaintiffs suing Monsanto Co., claiming the company's blockbuster Roundup weedkiller caused their cancers.

Jeffrey Sabraski is one of 13,400 plaintiffs with federal or state Roundup lawsuits pending against Monsanto around the country. Most of them have a form of non-Hodgkin lymphoma. At least four cases, including a wrongful-death suit filed Wednesday, originated in Minnesota.

Sabraski sprayed Roundup several times a week over the past two summers, often wearing shorts and a T-shirt, to control weeds around buildings as part of his job as a maintenance and grounds-keeper foreman at Thies and Talle Management Inc., according to the lawsuit filed Tuesday in federal court in Minnesota. He was diagnosed with diffuse large B-cell Non-Hodgkin lymphoma in 2018.

Sabraski's case, like three others filed in Minnesota, will be automatically transferred to federal court in San Francisco, where federal Roundup cases are being consolidated. About 1,000 cases are now pending there.

The vast majority of the Roundup cases are filed in state courts around the country, including many in Missouri, where Monsanto is based, said Yvonne Flaherty, partner at Lockridge Grindal Nauen and chairwoman of the firm's mass tort litigation practice. The Minneapolis firm filed two cases for plaintiffs Wednesday.

The lawsuits don't just allege that the weedkiller caused cancer, but that Monsanto concealed and misrepresented information to regulators and consumers about the product's safety.

Roundup is one of the world's most widely used herbicides, used by gardeners on lawns and farmers on crops. With Roundup Ready seeds engineered by Monsanto, farmers can spray the herbicide on glyphosate-resistant crops, such as corn and soybeans, killing nearby weeds without harming the crops.

Though it is widely used, the product's active ingredient, the chemical glyphosate, remains highly controversial for its links to health hazards and threats to vulnerable wildlife such as monarch butterflies.

A spokeswoman for Bayer, the German chemical company that owns Monsanto, issued a company statement saying it will defend its product in court, while complying with a federal court order to start mediation with a group of plaintiffs.

"As this litigation is still in the early stages — with no cases that have run their course through appeal — we will also remain focused on defending the safety of glyphosate-based herbicides in court," the company said. "We continue to believe strongly in the extensive body of reliable science that supports the safety of Roundup and on which regulators around the world continue to base their own independent and favorable assessments."

Sabraski did not want to discuss the case, said Tony Nemo, his lawyer at Meshbesh & Spence. Nemo said Sabraski received several cycles of chemotherapy and that his cancer is now in remission.

The Meshbesh firm is also representing Charles and Connie Larsen of Mankato, who sued Monsanto last November, claiming Roundup resulted in Charles Larsen's follicular grade 1 non-Hodgkin lymphoma. Larsen used

Roundup from 2005 to 2011 while working as a maintenance foreman for Minnesota Pork Inc., applying it around farm buildings from an ATV-mounted spraying apparatus.

Nemo said he expects to file more lawsuits.

Stunning losses dealt to Monsanto in the first three Roundup cases to go to trial have sparked more public interest. The three trials were all in California — two in state courts and one in federal court.

In the latest verdict, earlier this month, a state court jury in Oakland ordered Monsanto to pay Alva and Alberta Pilliod \$2 billion in punitive damages and \$55 million in compensatory damages. The sums will almost certainly be reduced by the courts, as were the first two damage awards.

“We’ve seen a dramatic uptick in calls to our office,” Nemo said.

Flaherty, too, said she expects more cases to be filed in Minnesota.

Last week, U.S. District Judge Vince Chhabria in San Francisco appointed Kenneth Feinberg to lead court-mandated settlement talks with Bayer in the federal litigation. Feinberg has led some of the country’s highest-profile mediations, including talks for the September 11th Victim Compensation Fund and the BP Deepwater Horizon oil spill.

Cancer link?

In April, the U.S. Environmental Protection Agency concluded that glyphosate is not a carcinogen and doesn’t pose a threat to the public when it is used according to its current label.

That assessments runs counter to a growing body of science that has linked glyphosate to cancer in humans. For example, in 2015 the International Agency for Research on Cancer, part of the World Health Organization, classified glyphosate as a probable cause of cancer in humans.

The lawsuits continue to pile up. On Wednesday, the Minneapolis firm of Lockridge Grindal Nauen filed two more cases in federal court in Minnesota.

In one, Brian Kreiner claims he used Roundup as directed in Minnesota “on properties in and around Nisswa, Minnesota from approximately 1998 to 2013.” He was later diagnosed with non-Hodgkin lymphoma and went through medical treatment.

In the other, the wife and daughter of Donald Peterson sued the company over Peterson’s death. Esther Peterson of Battle Lake and Heidi Genereaux of North Dakota claimed that Donald Peterson used Roundup in and around Battle Lake for more than a decade before developing non-Hodgkin lymphoma.

Staff writer Brandon Stahl contributed to this report.

Cheers, R.

Robert Daguiillard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (O)
+1 (202) 360-0476 (M)